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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
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10/774,916

02/09/2004

Cheng-Fang Hsiao

4-1012

8844

7590

08/24/2005

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EXAMINER

SUTHAR, RISHI S

ART UNIT

PAPER NUMBER

2851

DATE MAILED: 08/24/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

SP

| | | | |
|------------------------------|------------------------|---------------------|--|
| Office Action Summary | Application No. | Applicant(s) | |
| | 10/774,916 | HSIAO, CHENG-FANG | |
| | Examiner | Art Unit | |
| | Rishi Suthar | 2851 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-4 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☒ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Oath/Declaration

1. The oath or declaration is defective. A new oath or declaration in compliance with 37 CFR 1.67(a) identifying this application by application number and filing date is required. See MPEP §§ 602.01 and 602.02.

The oath or declaration is defective because:
It does not include the notary's signature, or the notary's signature is in the wrong place.

Claim Objections

2. Claim 1 is objected to because it recites the limitations "the internal thread", "the limit traveler", and "the guide block" on page 3. There is insufficient antecedent basis for these limitations in the claim.
3. Claim 4 is objected to because it recites the limitation "the lining tube" on page 4. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
5. Claim 1-4 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 discloses “**multiple** telescopic lens”. It is unclear how applicant is driving multiple telescopic lenses with a drive source designed or a single telescopic lens. It is also disclose in claim 1 “the magnetic ring rotor being affixed to the designated space of the coil stator.” However, it is not possible to affix an object to a space.

Claims 3 and 4 disclose “...said guide block of camera lens mount can be affixed...” and “...said external thread and limit traveler of the telescopic lens can be affixed...”, respectively. The wording “can be” implies that the invention has not been completed as of the filing date of the application and remains indefinite.

Claim 3 discloses a sheath, which is stabilized on the camera lens mount. The term “stabilize” is a relative and subjective term which adds no clear meaning to the claim. Further in claim 3 on page 4, the wording “also the coil stator inside the camera lens mount” at the end of the claim is unclear. The relationship between this limitation and the rest of the claim is vague.

Claim 4 also discloses that the limit traveler can be affixed to the peripheral surface of the lining tube. The limit traveler is an apertured member of the lining tube, therefore, it cannot be “affixed” to the lining tube. Clarification is required.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1, 3 and 4 are rejected (as understood) under 35 U.S.C. 103(a) as being unpatentable over Kawai (U.S. Patent No. 4,963,000) and Maruyama (4,828,360) in view of Matsuzaki et al. (U.S. Patent No. 4,743,931).

Regarding claim 1, Kawai teaches in Fig. 1 a drive source of a camera lens comprised of a camera lens mount (lens barrel main body 1) and telescopic lens (11); a vibratory (ultrasonic) motor wherein an external thread (11a) of the telescopic lens is screwed with the internal thread (7a) inside the spindle (7); the limit traveler (key groove 11b) outside of the telescopic lens (11) couples with the guide block (straight key 12) of the camera lens mount to form a rotation-proof device (Col. 3, lines 26-30); and wherein an internal thread (7a) inside the spindle drives the telescopic lens with external thread (11a) to form a camera lens module with built-in drive source. Kawai does not teach a drive source for a camera lens comprising of a stepper motor having a coil stator with multiple pole teeth and a magnetic ring rotor inside the coil. Maruyama discloses prior art in Fig. 1 a drive source for a camera lens that has a stepper motor (3), a coil stator (6) with multiple pole teeth (Col. 1, lines 41-43) and the magnetic ring rotor (4) being placed inside the designated space of the coil stator (6) to drive external threads (5) on a telescopic lens (1). Matsuzaki et al. teaches a lens drive system where the lens drive motor can be either a stepping motor or an ultrasonic motor (Col. 27, lines 62-64). It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify the lens drive source of Kawai by replacing the vibratory motor with a stepper motor as taught by Maruyama in view of the teachings of Matsuzaki et al. since the two types of motors can both be used as a drive source for a camera lens.

Regarding claim 3, Kawai teaches a guide block (12) of a camera lens mount which is affixed to a sheath (2) (Col. 2, lines 59-60), which is stabilized on the camera lens mount (1) by a screw fastener (Col. 2, lines 22-23).

Regarding claim 4, Kawai teaches that the external thread (11a) and limit traveler (11b) of the telescopic lens are situated on the peripheral surface of the lining tube (11) (see Fig. 1).

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Sumi (U.S. Patent No. 4,763,150) and Aoshima (U.S. Patent Application Publication No. US 2003/0007799 A1) both disclose lens systems with built-in drive systems.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

RS


Michael Tokar
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